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\$ 2617

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*Admitted only in Maryland *Admitted only in Virginia •Practice Limited to Federal Agencies

April 13, 2006

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Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Art Unit 2617

Attn: Mail Stop Amendment

Re:

U.S. Utility Patent Application

Application No. 09/550,644; Filed: April 14, 2000

Method and System for Down-Converting an Electromagnetic Signal,

Transforms for Same, and Aperture Relationships

Inventors: Our Ref:

Sorrells et al. 1744.0010009

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. Credit Card Payment Form (PTO-2038) in the amount of \$180.00 to cover the Information Disclosure Statement fee;
- 2. Fee Transmittal Form (PTO/SB/17);
- 3. Eleventh Supplemental Information Disclosure Statement;
- 4. Form PTO-1449 listing eighteen (18) documents; and
- 5. One return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Sterne, Kessler, Goldstein & Fox PLLC.: 1100 New York Avenue, NW: Washington, DC 20005: 202.371.2600 f202.371.2540: www.skqf.com

Commissioner for Patents April 13, 2006 Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Virgil L. Beaston

Attorney for Applicants Registration No. 47,415

VLB/sjc Enclosures

520173_1.DOC

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PTO/SB/17 (01-06) Approved for use through 07/31/2006. OMB 0651-0032 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction ersons are required to respond to a collection of information unless it displays a valid OMB control number Complete if Known Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). Application Number 09/550,644 TRANSM Filing Date April 14, 2000 For FY 2006 First Named Inventor David F. Sorrells **Examiner Name** Bhattacharya, Sam Applicant claims small entity status. See 37 CFR 1.27 Art Unit 2617 TOTAL AMOUNT OF PAYMENT \$180.00 1744.0010009 Attorney Docket No. METHOD OF PAYMENT (check all that apply) Check X Credit Card L Money Order None Other (please identify): X Deposit Account Deposit Account Number:_ 19-0036 Deposit Account Name: Sterne, Kessler, Goldstein & Fox P.L.L.C. For the above-identified deposit account, the Director is hereby authorized to: (check all that apply) Charge fee(s) indicated below Charge fee(s) indicated below, except for the filing fee Charge any additional fee(s) or underpayments of fee(s) Credit any overpayments under 37 CFR 1.16 and 1.17 WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card Information and authorization on PTO-2038.

FEE CALCULATION (All the fees below are due upon filing or may be subject to a surcharge.) 1. BASIC FILING, SEARCH, AND EXAMINATION FEES

	FILING FEES Small Entity		SEARCH FEES Small Entity		EXAMINATION FEES Small Entity			
Application Type	Fee (\$)	Fee (\$)	Fee (\$)	Fee (\$)	Fee (\$)	Fee (\$)	Fees Paid (\$)	
Utility	300	150	500	250	200	100		
Design	200	100	100	50	130	65		
Plant	200	100	300	150	160	80		
Reissue	300	150	500	250	600	300		
Provisional	200	100	0	0	0	0		

2. EXCESS CLAIM FEES **Small Entity** Fee (\$) Fee Description Fee (\$) Each claim over 20 (including Reissues) 50 25 Each independent claim over 3 (including Reissues) 200 100 Multiple dependent claims 360 1 2 0

				300	100
Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dep	endent Claims
20 or HF	o = x		=	Fee (\$)	Fee Paid (\$)
HP = highest number of	total claims paid for, if gr	eater than 20.			
Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)		
2 UD			_		

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

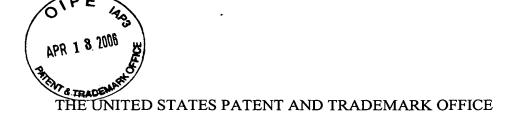
Extra Sheets Number of each additional 50 or fraction thereof Total Sheets Fee Paid (\$) - 100 = / 50 = (round up to a whole number) x 4. OTHER FEE(S) Fees Paid (\$) Non-English Specification, \$130 fee (no small entity discount) Other (e.g., late filing surcharge):_

Information Disclosure Statement fee

\$180.00

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SUBMITTED BY	/ · 0 · 4						Ξ
Signature	ling L.	Bent	Registration No. (Attorney/Agent)	47,415	Telephone	(202) 371-2600	
Name (Print/Type)	Virgil L. Beaston	,			Date 4	13/06	

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



In re application of:

SORRELLS et al.

Appl. No.: 09/550,644

Filed: April 14, 2000

For: Method and System for Down-Converting an Electromagnetic Signal, Transforms for Same, and

Aperture Relationships

Confirmation No.: 9317

Art Unit: 2617

Examiner: Bhattacharya, Sam

Atty. Docket: 1744.0010009

Eleventh Supplemental Information Disclosure Statement

Mail Stop Amendment

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. The numbering on this Eleventh Supplemental Information Disclosure Statement is a continuation of the numbering in Applicants' Tenth Supplemental Information Disclosure Statement filed on March 14, 2006 in connection with the above-captioned application.

Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated. 04/14/2006 JADDO1 00000070 09550644

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189.99 OP

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

Applicants provide the following comments regarding the documents:

Documents AC72, AD72, and AG72 are co-owned patents which are directed to related subject matter.

Documents AE72 and AF72 were cited in an Office Action in related U.S. Patent Application No. 10/394,069, filed March 24, 2003, entitled "Method and Circuit for Down-Converting a Signal," directed to related subject matter. Also cited in said Office Action was U.S. Patent No. 6,836,650, which has already been cited in the present application.

Documents AF72, AH72, and AI72 were cited in an Office Action in related U.S. Patent Application No. 11/173,021, filed July 5, 2005, entitled "Method and Circuit for Down-Converting a Signal," directed to related subject matter.

Documents AA73-AI73, AA74, and AB74 were cited in an Office Action in related U.S. Patent Application No. 10/305,299, filed November 27, 2002, entitled "Method and Apparatus for Improving Dynamic Range In a Communication System," directed to related subject matter. Also cited in said Office Action were U.S. Patent Nos. 5,339,459 and 5,517,688, which have already been cited in the present application.

This statement should not be construed as a representation that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Applicants have checked the appropriate boxes below:

☐ 1. Statement under 37 C.F.R. 1.704(d). Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received

by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this information disclosure statement.

- 2. Filing under 37 C.F.R. § 1.97(b). This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.
- - a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
 - b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more

than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).

- ☐ 4. Filing under 37 C.F.R. § 1.97(d) This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee.
 Enclosed find our PTO-2038 Credit Card Payment Form in the amount of \$_____ in payment of the fee under 37 C.F.R. § 1.17(p); in addition:
 - a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
 - b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).

- 5. The document(s) was/were cited in a search report by a foreign patent office in a counterpart foreign application. Submission of an English language version of the search report that indicates the degree of relevance found by the foreign office is provided in satisfaction of the requirement for a concise explanation of relevance. 1138 OG 37, 38.
 6. A concise explanation of the relevance of the non-English language documents appears below in accordance with 37 C.F.R. § 1.98(a)(3):
 7. In accordance with 37 C.F.R. § 1.98(a)(2), copies of the U.S. patents and patent publications cited on the attached Form PTO-1449 are not enclosed.
- ______, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

 Thus, copies of these documents are not attached. 37 C.F.R. § 1.98(d).

 1. It is expected that the examiner will review the prosecution and cited art in the parent application nos. 09/521,879, filed March 9, 2000, 09/293,342, filed April 16, 1999 (now U.S. Pat. No. 6,687,493), and 09/176,022, filed October 21, 1998 (now

8. Copies of the documents were cited by or submitted to the Office in an IDS that

complies with 37 C.F.R. § 1.98(a)-(c) in Application No._____, filed

U.S. Pat. No. 6,061,551), in accordance with MPEP 2001.06(b), and indicate in the next communication from the office that the art cited in the earlier prosecution histories has been reviewed in connection with the present application.

It is respectfully requested that the Examiner initial and return a copy of the enclosed Form PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Virgil L. Beaston

Attorney for Applicants Registration No. 47,415

Date:

1100 New York Avenue, N.W. Washington, D.C. 20005-3934

(202) 371-2600

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Page 1 of 3 APPLICATION NO. ATTY. DOCKET NO. 1744.0010009 **FORM PTO-1449** 09/550,644 FIRST NAMED INVENTOR **ELEVENTH SUPPLEMENTAL** David F. SORRELLS INFORMATION DISCLOSURE STATEMENT **ART UNIT FILING DATE** April 14, 2000 2617 **U.S. PATENT DOCUMENTS** EXAMINER DOC. CLASS DOCUMENT NUMBER DATE NAME SUB-CLASS FILING DATE INITIAL REF. AA AB 03/2006 Sorrells et al. 7,010,286 B2 AC72 AD72 7,010,559 B2 03/2006 Rawlins et al. 07/1992 White AE72 5,131,014 05/2002 Reber AF72 6,393,070 B1 03/2006 AG72 7,016,663 B2 Sorrells et al. 3,694,754 09/1972 AH72 Baltzer 06/1990 Jovanovic et al. A172 4,931,716 **FOREIGN PATENT DOCUMENTS EXAMINER** DOC. CLASS SUB-CLASS **TRANSLATION** DATE COUNTRY DOCUMENT NUMBER INITIAL REF. Yes ΑJ Nο Yes ΑK No Yes ΑL No Yes AM No OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.) **EXAMINER** DOC. CITATION INITIAL REF. ΑN ΑO AP AQ AR

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

DATE CONSIDERED

EXAMINER

FORM PTO-1449

Page 2 of 3 APPLICATION NO. 09/550,644 ATTY. DOCKET NO. 1744.0010009 FIRST NAMED INVENTOR David F. SORRELLS

INFORMATION DISCLOSURE STATEMENT			FILING DATE ART UNIT				
			U.S. PAT	April 14, 2000 ENT DOCUMENTS	2617		 -
EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA73	3,617,898	11/1971	Janning, Jr.			
	AB73	3,764,921	10/1973	Huard			
•	AC73	4,158,149	06/1979	Otofuji			
	AD73	4,380,828	04/1983	Moon			
	AE73	4,562,414	12/1985	Linder et al.			
	AF73	4,814,649	03/1989	Young			
	AG73	4,845,389	07/1989	Pyndiah et al.			-
	AH73	5,172,019	12/1992	Naylor et al.			
	AI73	5,263,198	11/1993	Geddes et al.			
			FOREIGN P	ATENT DOCUMENTS			1
EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATIO
	AJ						Ye N
	AK						Ye N
	AL						Ye
	АМ						Ye
		OTHER DOCUMENT	S (Including	Author, Title, Date, Per	rtinent Pages,	etc.)	
EXAMINER INITIAL	DOC. REF.			CITATION			
	AN						
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	AP						
	AQ						
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	AR						
EXAMINER	AR				DATE CO	NSIDERED	

Page 3 of 3 TRANS APPLICATION NO. ATTY. DOCKET NO. **FORM PTO-1449** 1744.0010009 09/550,644 FIRST NAMED INVENTOR **ELEVENTH SUPPLEMENTAL** David F. SORRELLS INFORMATION DISCLOSURE STATEMENT **ART UNIT FILING DATE** April 14, 2000 2617 **U.S. PATENT DOCUMENTS** EXAMINER DOC. DOCUMENT NUMBER DATE NAME CLASS SUB-CLASS FILING DATE INITIAL REF. 08/1996 AA74 5,551,076 Bonn AB74 5.633.610 05/1997 Maekawa et al. AC AD ΑE AF AG AH ΑI **FOREIGN PATENT DOCUMENTS EXAMINER** DOC. DATE COUNTRY CLASS SUB-CLASS TRANSLATION DOCUMENT NUMBER INITIAL REF. Yes AJ No Yes AK No Yes AL No Yes ΑM No OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.) EXAMINER DOC. CITATION INITIAL REF. AN AO AΡ AQ AR **EXAMINER** DATE CONSIDERED

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and not considered. Include copy of this form with next communication to Applicant. 516139_1.DOC